When vulnerable peoples’ lives are at risk, they depend on receiving humanitarian aid. To deliver it, nonprofits must manage the volatile and turbulent supply chain along the last kilometre: The frontline.

Today, frontline humanitarian logistics are mostly managed by a bespoke patchwork of paper forms and spreadsheets. In the digital era, where everyone online connects through the same internet, the possibility of a shared data model for frontline humanitarian logistics makes sense. Not only would such a model usher new levels of efficacy, but it would also enable smooth interoperability amongst humanitarian actors. When it is reported that logistics accounts for between 60 and 80 percent of emergency program costs\(^1\), a frontline humanitarian logistics data standard also holds the promise of improved cost management.

NetHope’s Center for the Digital Nonprofit is convening a wide spectrum of sector stakeholders (e.g., global nonprofits, multilateral agencies, technology vendors, academia) and subject matter experts, to define a common understanding of frontline humanitarian logistics. Collectively, these stakeholders will help determine how humanitarian logistics actors can work with technology partners to create technology capabilities based on interoperable data models to develop shared data models for the sector.

The Frontline Humanitarian Logistics workstream started in July 2019 with a learning phase aimed at taking stock of what is working, what is not working but should work, and what is yet to work. The workstream engages logistics specialists from nonprofits and is informed by experience and academic research\(^2\).

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\(^1\) Fenton, G (2013) The Logistics of the Last Mile
On 3 October 2019 in Nairobi, this effort engaged the participants to the Africa Logistics Conference through a design thinking workshop. Bright logistics experts, humanitarian leaders, professors, and students, contributed their knowledge and ideas through collaboration and ideation. This is the report from the workshop that was also moderated by Mr. George Njeru of the Inter-Agency Working Group.

The workshop

The objective of the workshop was to create a common understanding of current capabilities, where things are working well, where they are not working as well, and where there is opportunity to accelerate the sector through harnessing technology.

The workshop lasted for one and a half hours and started by defining the boundary of frontline humanitarian logistics and presenting a typical frontline logistics journey. In general, the focus of frontline humanitarian logistics is between the in-country warehouse (national/regional level) and the hands of beneficiaries.

The workshop continued with an interactive portion that consisted of three phases:

1. Participants individually shared what is working particularly well with frontline humanitarian logistics in a way that created collective inspiration;
2. Groups identified relevant pains, needs, technology, and trends throughout a prototypical frontline humanitarian logistics journey;
3. Each group voted on a pain point and co-created solutions using a brainwriting methodology.

During the workshop each group reported on their findings and the solutions they developed. This generated enthusiasm, engagement and inspiration. The following is a diagram of the workshop flow:

(###) Number of artefacts produced

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IDEATE

- What is working well (54)
- Frontline Humanitarian Logistics definition
- Pain (65), Needs (52), Technologies & Trends (50)

FOCUS

- Vote on a pain point (11)
- Co-create solutions (71)
- Report

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Results and Analysis
The audience surfaced 54 elements representative of what is currently working well with frontline logistics. Teams used post-it notes to record their thoughts and ideas for key moments across the frontline logistics journey. Together, we mapped 65 pain points, 52 needs, and 50 technologies and trends. Each group voted on a pain point to solve and 11 pain points where selected. These resulted in 71 solutions co-created through a brainwriting exercise. The data from each exercise is in the appendices.

This word cloud visual representation of text data shows a view of all the content shared by the participants. The frequency of each word is shown with different font size.
What is working well

The first exercise of the workshop was for participants to record what is working well with frontline logistics. The collective agreement is that interactions among people at all levels enable the timely delivery of critical goods and services in response to humanitarian crisis. From press media reports that mobilize public engagement, to coordination with governments, local leaders and communities, human networks function well in frontline logistics. Teams are able to quickly identify and respond to crisis and deliver products that are needed in the moment.

Pain, needs, technologies, and trends

The second exercise was to map the pains, needs, technologies, and trends along moments that constitute a prototypical frontline humanitarian logistics journey. The following images are compilations of digital transcription from the Post-its.

Pains

Most of the pain points were located at the beginning of the logistics journey from assessment to procurement. Pains were mostly related to inadequate infrastructure (roads and phones), hostile environments, and communication issues. During emergencies, failures of infrastructure and lack of information can create substantial pain points in the delivery of aid. In addition, gender inequality and a continent with more than 2,000 languages spoken, it is also no surprise that in times of crisis, language barriers can present a substantial logistics challenge. Emergencies can bring out the best in people, or the worst. Corruption, fraud, and terror can raise impediments to successful logistics.
Needs
Notes representing needs were evenly distributed throughout the frontline logistics journey. The need to remedy the most frequent pain points (e.g., infrastructure, safety, information) were clearly noted. The need for resources (human, financial and security) was also identified. Cooperation and coordination across the spectrum of stakeholders was listed as a need throughout the entire journey, as well as the requirement for accurate data and information leading to better decisions. The last mile/kilometre is a volatile and turbulent environment in which teams need agility to adapt quickly to changing conditions.

Technologies and Trends
Most technologies and trends were located toward the end of the journey (i.e., from manage to adjust). Security, data, and systems were listed throughout. Recall that security (e.g., safety, terrorism) have appeared in pain points and needs, and thus are widespread concerns. Drone and cold-chain refrigeration were the most frequently noted technologies. The ubiquity of mobile phones and GPS can greatly support frontline supply chains. Across the continent, the population is young and adopts technology easily.

Selected pain points and solutions
Each group voted on a single pain point to solve. As these votes were independent, there was some overlap in the 11 pain points selected (e.g., insecurity and lack of security).
A brainwriting exercise enabled all participants to contribute to the co-creation of solutions. The detail of these solutions is in the appendix. This is a summary of pain points (in bold) and solutions:

- **Negotiation under high pressure**: Solutions emphasized the importance of negotiation skills training, and displaying proper situational behaviours (e.g., calmness), as well as the need for deep engagement/relationship with affected communities. There was a recognition of the contextual risk that when people are upset as a result of a crisis they may not behave rationally and/or may take advantage of the situation – hence making negotiations more complex.

- **Insecurity and language barriers**: Participants proposed that engagement of the community and local leaders could go a long way to learn risks and to mitigate them as local people hold knowledge of the current context and proficiency of spoken languages and dialects. Recall it is estimated that there are more than 2,000 languages spoken throughout the continent and that during emergencies, high precision is required of communications for them to be effective. This is thus best done in the language most people are accustomed to and by the leaders that people already trust. Planning for the scenario ahead of time (e.g., have conduct simulation exercises with local government) was suggested as a means to improve preparedness. However, when the situation is too risky, participants advised that it may be best to call on governing bodies (e.g., police, armed forces) to restore safety.

- **High operational costs**: A path to resolving this challenge could be that stakeholder selection and engagement be combined with data analytics and pre-negotiated contracts to make the process more efficient.

- **Bureaucracy and duplication**: The proposed solution was to increase standardization and focus on optimization. Note that standardization is one goal of the Frontline Humanitarian Logistics workstream.

- **Lack of security**: There is an acknowledgement that information is essential for risk planning and monitoring. However, real-time updates depend on power and connectivity being present – which are often found to be lacking during disasters or in remote areas.

- **Improper mapping**: Crowdsourcing the production of maps was proposed as a solution, with the recognition that internet access may be a limiting factor to participation. Note that the crowdsourcing of maps is already happening³. For example, the logistics cluster receives real time map updates from partner organization which are included in tools such as MapAction, OpenStreeMap, and Ushahidi.

- **Late government response/declaration of disaster hence financial delays**: The audience recommended that better pre/post disaster information and government/community engagement must be complemented by adequate funding to be effective.

- **Bad coordination**: The group addressing this pain point offered that the formation of consortia, and government/cluster coordination can address this pain point, so would good data and coordinating from a single point, not multiple ones.

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• **Lack of coordination between teams:** People identified team building and training, and a streamlined chain of command, as essential elements to address this challenge.

• **Customs Clearance Delays:** It was recommended that flexibility should be built in to policies/laws for emergency situations (e.g., government exemptions, legislation governing humanitarian goods), and to use technology to make humanitarian imports easy. Note that there is a UN/CEFACT project\(^4\) to address this issue.

• **Poor infrastructure:** The contributors proposed that an important part of the solution would be good communications’ capabilities, leveraging of technology (e.g., drones), as well as continuing to invest in strengthening national infrastructures.

People participating in the workshop during the Africa Logistics Conference started the contribution to potential solutions that will shape future frontline humanitarian logistics. They engaged, collaborated, laughed, and generated an amazing number of ideas and solutions. These solutions depend on people working in different ways, supported by agile processes, and made possible by technology.

This workshop represents another example of the real problems faced by African nations and how they can rapidly find solutions through the diverse collaboration of a broad spectrum of stakeholders. We are grateful for the participants who took the time to contribute to the challenge of improving frontline humanitarian logistics.

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\(^4\) Readiness for Emergency Relief Importation (n.d.). Retrieved from [https://unefact.unece.org/display/unefactpublic/Readiness+for+emergency+relief+importation](https://unefact.unece.org/display/unefactpublic/Readiness+for+emergency+relief+importation)
Appendixes

Appendix: What is working (54)

- Flexibility
- Advance planning
- Local Knowledge
- Coordination
- Using existing distribution channels
- Creativity
- Information Dissemination
- Leadership (2)
- Technology is a plus
- Good collaboration with local leaders
- Use of technology seminars
- Good rapport with community leaders
- Stakeholder engagement
- Human resources in the community
- Involvement with the stakeholders
- Ethics and integrity
- Planning and organisation of all players
- Coordination
- Availability of fleet for transportation
- IT allows real time monitoring
- Packaging customization of the commodities for example: branding of commodities
- Packaging - can be customized
- Planning for demand
- Information flow TOP - BOTTOM
- Warehousing
- Requisition by last mile service delivery point
- Bulk breaking of orders to ensure optimality
- Transportation based on context
- Funding
- Willingness
- Coordination
- Network coverage
- Transportation and communication strategy
- Legal framework in place
- Human resource mobilization
- Disaster response plan in place
- Supply mobilization
- Factual media reporting to help in mobilizing support
- Response time is key
- Coordination between the humanitarian on the field being able to understand what they need at that particular time and meeting it.
• Lead time
• Available manpower committed to offer service
• Timely information flow between those on ground and those in HQ’s
• Flexibility
• Public awareness
• Collaboration between stakeholders
• Abundancy and connection amongst humanitarian operations
• Reliable technology
• Team work
• Improvisation
• Rewards and incentives
• Response time, zero lead times, Communications prompt and efficiency
• The use of technology in times of humanitarian crisis
• Response rate, efficient storage & their inventories. Partnerships awareness in humanitarian logistics
• Lack of political goodwill
• Punitive regulatory laws
• Not enough man power
• Gender issues and complications in certain population where women are seen as inferior to men
• Low integrity
• Low coherence
• Framework, language, responses, deployment
• Language barriers
• Lack of necessary equipment
• Poor mobile phone communication network
• Poor infrastructure
• Lack of infrastructure
• lack of infrastructure, roads are broken
• Inflation
• Language barrier
• Intercountry policy barriers
• Infrastructure
• Fraud, integrity and bureaucracy
• Corruption and embezzlement of funds
• High cost of operation
• Poor transport, delay of goods, counterfeit goods
• Poverty, corruption
• Hostility from the affected communities
• Different government custom regulations and barriers
• Lack of systems, integration
• Terror attacks
• Negotiating under high pressure (tension) and aggressive people
• Poor infrastructure
• Hostile environment
• Language barriers
• Hostile environment
• Accessibility of products – cold storage availability
• Government regulation, insecurity, bad goods, climate change, hostile environments
• Poor infrastructure
• Political differences
• Mapping improperly done
• Terror groups
• Climate
• Competent expertise in the gov
• Insecurity, terror groups, language barriers, climate, improper mapping
• Intimidations of officials, cultural differences, strict government regulations, ineffective communication, Insecurity, political instability
• Unconducive: Weather, e.g., too much rain leading to floods.
• Lack of enough data: Culture clash, language barriers
• Poor infrastructure, corruption, under supply
• Late government response declarations of disasters, hence funding delay
• Discrimination
• Poor assessment of the target areas of the NGOs
• Introduction of new process in particular country that were not previously there extending lead times.
• Lack of information for planning
• Insecurity (local and relief agencies)
• No storage facilities
• Cultural barriers/language barrier (nomads)
• Poor road network for last mile
• Customs clearance
• Cold chain facilities missing – no power
• Last mile delivery costs
• No. of vehicles
• Geolocate endangered communities/individuals
• Appropriate storage for perishable foods
• Commodity quality inspection takes time
• Lack of information, supplies, deliveries, timeline
• Security, terrain poor
• Poor government security mechanisms
• Sickness on part of humanitarian personnel
Appendix: Needs (52)

- Security
- Clear tax exemption guidelines and processes
- Proper responses from the government
- Stakeholders involvement
- Improvement of infrastructure – government/country investment
- Involvement of local community leaders in plans
- Good policy - government
- More stakeholder engagement
- Good guidance
- Better infrastructure, roads and technology
- Involvement of community stakeholders
- Better infrastructure
- Better means and channels of communication
- Better technology
- Research to support people and develop new strategies
- Data driven decision making
- Policy regulations need to be reviewed to facilitate efficiency
- Improvements in transportation
- Capacity building
- Innovations
- Knowledge and information sharing
- Policy/regulation
- Optimizing distribution and warehousing cost
- Limited resources HR, financial
- Hiring of expertise
- Centralised warehouse
Security
Shelter, accommodation
Basic needs met
Shelter
Networking, vaccinations
What are you trying to solve? Vaccinations
Food, security/vaccination
Networks, shelters – protection in terms of security
Condoms
Vaccinations
Reduced lead time, adequate supply
Collaboration amongst stakeholders at the design and planning
Pre-intervention assessment involving the different orgs. teams and stakeholders
Delivery of goods is good time without delay
Infrastructure (transport and communications)
Resources (financial, human)
Security
Need to plan for uncertainties
We need the army to provide security
Need to know when vehicles are hijacked
Updating situation awareness report
Government willingness to help
Focal point of coordination well communicated
Updated and accessible inventory in warehouses
More humanitarian local experts and more locally sourced commodities / resources
Escorts, local communication, airlift one mode
- Costs
- A plan software for planning distribution
- Collaboration (PPP)
- Need for block chain
- Technology necessity
- Technology – drone to deliver commodities in inaccessible areas
- Harmonization of technology
- Reporting – key notes
- Security and data concerns
- Communication technologies like mobile phones
- Digital means of the public to raise complaints or issues they have during crisis
- Automation of processes
- Cold refrigeration
- E-commerce
- Use of RFID to track goods from point of origin to end user
- Big data
- Emphasis on ethics, values and integrity
- Use of AI, Big Data analytics, and block chain technologies
- Technological advancements
- Real time tracking
- Air Crafts
- Cool chain technology systems
- Management systems
- Raising awareness through media and technology
- Visibility systems
- Cold store refrigeration for perishable goods.
• Automation of process to reduce time when getting documents
• Too much information that makes data different
• Computer focused data entry. Use of photography and videos in documentary
• Use of GPS, Automated inventory management systems
• A feedback mechanism system
• Young populations, photographics
• Renewable energy (solar)
• Warehouse management systems
• Social media platforms
• Logistics management systems
• Drones
• People mobility and integration (often seasonal)
• Lack of collaboration with government
• How to deal with hurt staff
• Reliable alert systems (mobile phones)
• Progression of the problem (e.g., areas that get progressively inundated in a flood)
• Digital maps
• Block chain
• Terrorism attacks
• Drones
• Quantities of supplies at various points
• Tech to pass alerts to actor
• Electronics fund transfer
• Data storage and transfer by phone
Appendix: Solutions to Selected Pain Points (71)

The following is the digital transcription of the solutions ushered by the workshop participants:

PAIN POINT: Negotiation under high pressure
Summary: Importance of negotiation skills training, behaviours (e.g., calmness), and engagement/relationship with affected communities. Recognition that when people are upset as a result of a crisis they may not behave rationally and/or may take advantage of the situation.

SOLUTION: Advance planning mapping preparation and preparedness in terms of areas of focus so as to eliminate and mitigate the challenges.
OBJECTION: How do plan mapping help in negotiation to reach a level ground?
Better yet identify a negotiator and send the person.
IMPROVEMENT: It’s a good alternative to the solution.

SOLUTION: Knowledge on BATNA and negotiating tactics. Read more on negotiation and practice negotiating with other people.
OBJECTION: The region’s negotiators may be working for their own benefit in times of crisis.
IMPROVEMENT: Will work but need to add more skills. Do a skills set gap analysis and focus on improvement.

SOLUTION: Find a better strategy of negotiating/use better methods of negotiating.
OBJECTION: Not everyone is a good negotiator thus getting a good negotiator with knowledge of negotiating will work.

IMPROVEMENT: Use of respected members of the community and use accredited negotiators. The respected may not be loved.

SOLUTION: Use of the local leadership in negotiating or the people who share the same culture. Involving or interacting with the communities even before calamity strikes in order to develop lasting or great bonds.

OBJECTION: If the negotiation was within the humanitarian team, the community may not help.

IMPROVEMENT: Eliminated the barrier through training and prior involvement of all stakeholders. But when people are mad, they are mad!

SOLUTION: Calmness.

OBJECTION: No objection.

IMPROVEMENT: It is a good negotiation strategy. There is no perfect solution to this kind of crisis.

SOLUTION: Creating awareness of the importance of negotiating.

OBJECTION: How do you think one can create awareness?

IMPROVEMENT: Teaching on good negotiating tactics and strategies.

SOLUTION: Teach the team the art of being good negotiators, self-control, good interpersonal skills.

OBJECTION: Calmness of who?

IMPROVEMENT: Calmness works well in power negotiations.

PAIN POINT: Insecurity and language barriers

Summary: Engagement of the community and local leaders can go a long way to learn risk and to mitigate them as they hold knowledge of the local context and languages. Planning for the scenario ahead of time (e.g., have security personnel) may improve preparedness, however, when the situation is too risky, it may be best to call on governing bodies to restore safety.

SOLUTION: Firstly, create a stakeholder forum to acknowledge the problem. Discuss the challenge. With acceptance from all parties, create a framework on how to engage, where there are language barriers and insecurities. Use the forum to actively engage.

OBJECTION: Creating a stakeholder forum will not work in crisis that require immediate attention or solution as creating stakeholder forum and bringing them together will take more time which could have been used to attend to the humanitarian crisis.

IMPROVEMENT: Stakeholders and community leaders are the key to insecurity and language barriers. Involving them solves the problem.

SOLUTION: Providing security to the humanitarian staff during distributions to the beneficiaries and during transportation.
OBJECTION: This will not work due to budgetary constraints and technical expertise challenges of the interpreters. Time restrictions in emergency situations may not provide adequate time to engage security agents and interpreters.
IMPROVEMENT: The solution could work if the objection raised are considered during implementation. The way forward is to first have a policy that is specific to emergency situations and incorporate the issue of insecurity and language barriers. Then make budgeting provisions during budgets and planning, this means it will be ready to deploy when needed. As point planning relevant authorities can use local leadership to draw a list of interpreters who are called upon when needed (a function which community leaders perform well). This could be embedded on the interior ministry/administrative structures – which is responsible for this.

SOLUTION: Involvement of local leaders to tackle insecurity concerns and provide intelligence reports to security agencies. Work with people at the grassroot level for better communications.

OBJECTION: The local leaders would not be able to tackle insecurity. The security agencies would. Perfect to have interpreters from the grassroot level.

IMPROVEMENT: Engage security agencies and local interpreters to support implementation processes at the last kilometre level.

SOLUTION: Including security agencies during our planning. Plan to have a translator from the local community who will move around with you to help in translation to avoid language barriers.

OBJECTION: How will you include and involve security agencies at the inception? How will you get a good translator who will not collude with the community and become more insecure to you?

IMPROVEMENT: Security can only come from the community directly not through the use of police or armed guards. Community leaders alert the members and you become more secure. Good strategy in any situation can make security to be the best.

SOLUTION: Involve the community to know how to secure the area and overcome the language barrier.

OBJECTION: So, need clear and strategical ways for what the law states and follow in order to activate.

IMPROVEMENT: Solution that cares for the community at large. Involvement of community and local leadership to identify security gaps and find ways to mitigate the gaps.

SOLUTION: have accountability and transparency. Accountability with leaders on security issues and transparency on security personnel and apparatus. This will then work.

OBJECTION: None.

IMPROVEMENT: Accountability with local leaders on security issues.

SOLUTION: Involvement of local communities in the programs. The local communities to the integral in the implementation of the program via short term contracts/engagements for community sensitisation and product distribution with data collection.
OBSESSION: The solution has not addressed the core challenge which is language barriers and insecurity; but has provided an enabler – via involvement of local communities. In such situations, contracts provision does not work. This is a people’s process which emotions attached. Data collection and product distribution comes last, without sorting language barriers well and must be a challenge.

IMPROVEMENT: for insecurity, in areas where insecurity level has grossly deteriorated, it is good to suspend operations until government restores sanity and calmness in term of security. In areas with mild insecurity, it is good to have security officers accompany you during your activities/operations to provide security and to ascertain safety.

PAIN POINT: High operational costs
Summary: Stakeholder selection and engagement can be combined with data analytics and pre-negotiated contracts.

SOLUTION: Have a clear laid out strategy before starting any project. Only procure what is necessary by ensuring you have a clear and appropriate procurement plan in place. Consolidate purchases to achieve value for money and economies of scale.

OBJECTION: efficient and effective policy and procedure must follow for any procurement plan to be in place. We have in-house procedure for procurement; therefore, this must be adhered to at all costs.

IMPROVEMENT: Develop a supply chain strategy with all involved actors at the start of a project. Strategy must be in line with local regulation and organization policy. Leverage on economies of scale to minimize cost.

SOLUTION: Integrity. Supply chain procedure must meet standard that are transparent.

OBJECTION: Fraudulent managers work in cartels so they can cook the books at all levels (on paper).

IMPROVEMENT: Creation of more labor.

SOLUTION: Leveraging on big data and analytics in demand planning, supply planning & distribution network optimization.

OBJECTION: This can be still controlled by the internal management through regulations, meetings to solve the costs.

IMPROVEMENT: Hiring more specialists (Involving them in the meeting to try and cut costs of operations).

SOLUTION: From past experience understand areas where humanitarian intervention might be needed in future and have pre-negotiated contracts with some of the critical service providers. This will prevent panic buying where the prices are inflated.

OBJECTION: None.

IMPROVEMENT: Preparedness for various crisis: having long term agreements with suppliers and service providers. Prepositioning goods and supplies with suppliers to reduce warehousing costs. Having decentralized procurement to cut transport and storage charges. Having clearly defined positions and roles of staff to avoid repetition of duties or overlap of duties.
SOLUTION: Stock preposition to manage high acquisition costs in times of emergencies. (i.e. have pre-agreed framework agreements in place).

OBJECTION: The vendor might charge a small fee for keeping the buffer stock. Perfect. The small fee is better than inflated prices and this will help bring down the cost.

IMPROVEMENT: Compare between storage fee and inflated prices to see what works well.

SOLUTION: High costs are a result of various variants such as inventory costs. This can be valued through optimization of inventory by speculation on when the order for commodities and when not to order.

OBJECTION: cost will be informed by extent of intervention (operations) required and many be subject to international price volatility.

IMPROVEMENT: pre-negotiated contracts with transport providers with a standard rate. Leverage on data to try and come up with forecasting models to predict humanitarian crisis such as weather related.

SOLUTION: This is an internal activity that the managers can control over it through policies at the organization.

OBJECTION: operation costs include labour, raw materials, this is difficult to formulate or come up with policies governing these issues.

IMPROVEMENT: The personnel in the supply chain should have settlement with the policy makers to devise laws and regulations that are effective and provide efficiency for both parties.

SOLUTION: Buy cheap raw materials but of high quality. Acquire cheap labour to reduce the operation costs.

OBJECTION: Cheap is not necessarily quality so do most of us think. Most cheap labour is not skilled. Experts are always expensive to hire though it depends on the country where the humanitarian supply chain is located.

IMPROVEMENT: use implementing partners in the affected region. Procure products that meet the purity objective within your available budget.

PAIN POINT: Bureaucracy. Duplication.

Summary: Standardization and optimization.

SOLUTION: Minimize processes and procedures. Standardization of procedures.

OBJECTION: will depend with the personality of the staff. You can have standardization built have them repeat orders.

IMPROVEMENT: adapt to the laid down procedure and internalize the same to avoid further missteps. Issues of efficiency in the system need to be addressed and take note of gaps.

PAIN POINT: Lack of security.

Summary: Information is essential for risk planning and monitoring. Real-time updates depend on power and connectivity being present.

SOLUTION: Always have security present with staff. Employ services of a private security firm.
OBJECTION: The private firm may not agree to work in volatile areas. Disasters may also need a medical security.
IMPROVEMENT: Build up contingency fund to pay security in case of emergency need. Involve government agency.

SOLUTION: Build INGO staff (field and HQ) capacity on security & also partner staff and other participants. Also coordinate with government security agencies and other stakeholders.
OBJECTION: Problem might arise where the government security etc. does not have political will to implement. Insecurity is an external threat how will capacity building help for actors?
IMPROVEMENT: Use more tech for social good solutions to ensure monitoring, governance and accountability. The government may be educated on the importance of building system into place to ensure the security issues will be handled. Identify threats in advance to create response mechanisms in advance.

SOLUTION: Establish a long-term trust relation with locals.
OBJECTION: Commodity passes through areas where you don’t have work. The community there does not know the organizations. They will attack your staff, drivers, and steal commodity being transported. Takes longer to achieve. No time to establish long-term because disasters are short-term.
IMPROVEMENT: Engage locals through hiring some from the community. Locals can post insecurity issues to an app in advance and propose mechanisms.

SOLUTION: A system to ensure every humanitarian is taken care of. To provide guards on the area and also on each person on the ground.
OBJECTION: What kind of a system and what components will provide solution and how? Unpractical and expensive to have a guard for each person.
IMPROVEMENT: Use of home guards would be cheaper. System should gather intelligence information from trusted data champions who can be rewarded/incentivised.

SOLUTION: Solution involves developing app (tracking system) to attest local security when in danger. Digital maps shall enable digital visualization of location of the frontline through aerial view. Unmanned drones could deliver safe supplies and de-risking the threat to life of frontline personnel.
OBJECTION: Lack of technology in that area to ensure the tracking system is in place. The app should collect insecurity information before disaster happens so as to help actors develop solutions in advance.
IMPROVEMENT: Ensure reliable power and internet connection for success in use of systems.

SOLUTION: Create a security intelligence information system to gather information in advance on potential security threats, users of system can then generate potential solution in advance.
OBJECTION: This is good however it won’t work in areas with no power and no internet connection
IMPROVEMENT: Mobile technology solutions like use of data bundles should be encouraged because they can work with solar power. Mobile phone company may be called to install masts.

SOLUTION: Government escorts. Involve local leadership in the response programme community elders.

OBJECTION: involve government is good while in preparedness. Slow process relaying on single pin-pointed persons.

IMPROVEMENT: Sufficiently hold consultations. Pre-positioning of goods. Have good communication, good vehicles.

PAIN POINT: Improper mapping
Summary: Crowdsourcing maps with the recognition that internet access may be a limiting factor.

SOLUTION: Use of digital maps, xxx used over Google (Google maps)

OBJECTION: This probably will not work because of the beneficiary in the government facilities/procedures.

IMPROVEMENT: Use wananchi (note: Wananchi is Swahili for citizens) with their smart phones to map. Exercise would also have workers to help map.

SOLUTION: Clear zoning from the respective ministries.

OBJECTION: Government not funding this cause because they may not understand its importance.

IMPROVEMENT: Engaging the relevant stakeholders and carrying out vast research.

SOLUTION: Get to the ground to obtain accurate data from the ground.

OBJECTION: Identification & particular people become difficult when you cannot pinpoint their location.

IMPROVEMENT: Use the local natives to provide better directions.

SOLUTION: Use GPS.

OBJECTION: There is limited access to the internet in some interior regions.

IMPROVEMENT: Collaboration with the land surveys and mapping specialists to acquire better and improved location maps.

SOLUTION: Use of GPRS tracking maps in areas which are accessible or guidance from natives who are well versed with the area locality.

OBJECTION: Poor internet connections hinder use of Google maps.

IMPROVEMENT: Proper investment in telecommunication companies

SOLUTION: Use of location tracking devices to pinpoint location and make sure of the available boundary maps

OBJECTION: It may not be possible due to the limited data available and this tracking device may not be working in places where there is no internet.
IMPROVEMENT: Our exercise would have helped. Individual citizens could help mapping using their mobile phones.

PAIN POINT: Late government response/declaration of disaster hence financial delays
Summary: Better pre/post disaster information and government/community engagement must be complemented by adequate funding.

SOLUTION: While budgeting, the government should allocate funds that will solve any arising disaster.
OBJECTION: The issue is not lack of funding but a deliberate or performance delay on the part of the government.
IMPROVEMENT: Prior data gathering to better help persuade the government to declare disaster. This is to better help government official buy into the idea prevention or early response will be the best outcome for all parties.

SOLUTION: Government to have regular reviews on disaster situations and let the public know. INGOs to create their own expertise of individual agencies that can offer these reports.
OBJECTION: There is a lot of bureaucracy in government thus they man not want to announce a disaster as it will make them look bad. Thus, they wait until it is too big to hide.
IMPROVEMENT: The community should be engaged in disaster management as they are the ones affected directly (e.g., those in drought prone areas).

SOLUTION: More focus on advocacy to push government to respond to disasters rather than waiting for government to act.
OBJECTION: The solution may take long.
IMPROVEMENT: Focus should be in partnering with local communities and government agencies, e.g., Red Cross.

SOLUTION: Real time data collection for declaration of a disaster and response
Employing the use of government agencies to ascertain the real situation on the ground as soon it arises, e.g., Red Cross.
OBJECTION: The solution is not possible because of lack of adequate personnel to carry our research. Lack of adequate funds to facilitate research.
IMPROVEMENT: There should be adequate funds to facilitate the research process hence leading to smooth process of carrying out the research.

SOLUTION: Proper early funding planning by the government agencies responsible for finding such projects.
OBJECTION: It is not easy to know when a disaster will occur or how many disasters shall be there hence the planning for funds might be under- or over-planned.
IMPROVEMENT: The government agencies to be tasked with giving timely accurate reports on the disasters as per their mandate. The humanitarian agencies to create an agency that can be experienced in evaluating analysing and reporting on these disasters and the report be adapted by the humanitarian community.
SOLUTION: Proper early research on areas with high probability of being affected and releasing it to general public.

OBJECTION: Research on the affected areas and releasing it to the general public without funding will not help in mitigating the problem. With funds available, a greater percentage of action can be taken.

IMPROVEMENT: Perfect solution.

PAIN POINT: Bad Coordination

Summary: Formation of consortiums, government/cluster coordination, good data. Coordinating from a single point not multiple.

SOLUTION: Logistics Cluster.

OBJECTION: Logistics cluster does not activate everywhere.

IMPROVEMENT: Formation of consortiums to communicate coordination better.

SOLUTION: Timely communication to share information for shared goals.

OBJECTION: Breakdown of communication network, enabling timely communication.

IMPROVEMENT: Use of cloud data repository /use of cluster and movement facilitation.

SOLUTION: Good coordination.

OBJECTION: Donor conditions: too general, can't act on it.

IMPROVEMENT: Government and cluster coordination.

SOLUTION: Better planning using data and information already available as well as the tools available. Anticipating a disaster and running.

OBJECTION: Scenario has changed. Data invalid. Doesn’t say who’s responsible – delegation is needed.

IMPROVEMENT: Establish central repository of data, including fields for anticipated needed data given different emergency responses. Give clear authority to management of system including input and output rights and responsibilities.

SOLUTION: Have coordination being done from a single point

OBJECTION: Many organizations won’t let a single point (organization) tell them what to do and will choose not to listen. If it becomes like a command and control system; coordinated planning may not work. Every organization has different operating process – may lead to conflicts.

IMPROVEMENT: Seek consortiums in the absence of UN/OCHA or clusters or efficient Government department to facilitate coordination.

SOLUTION: Involvement of all stakeholders so that we can have a smooth flow.

OBJECTION: It might take too long before having all stakeholders involved. Resources can be duplicated.

IMPROVEMENT: Make a list of all stakeholders and contact them in parallel. Use.

SOLUTION: OCHA stay home.

OBJECTION: They need to be involved in the whole coordination process.
IMPROVEMENT: Have numerous offices in the different location for easier coordination.

SOLUTION: Create clear roles of responsibilities before emergency with clear authority during emergencies.
OBJECTION: This already exists OCHA has a clear mandate.
IMPROVEMENT: Information dissemination through and AI-based system where everybody provides input and you only get the info you need.

PAIN POINT: Lack of coordination between teams
Summary: Team building and training, streamlined chain of command.

SOLUTION: Trainings. Team building.
OBJECTION: Okay, however continuous training and team synergies is required to ensure consistent delivery in handling FHL.
IMPROVEMENT:

SOLUTION: Name interagency emergency response teams. Trainings / team building.
Streamline chain of command
OBJECTION:
IMPROVEMENT:

SOLUTION: Ensure there is communication between the involved teams.
OBJECTION: Works but....define levels of communication. Tactical communication strategy. What tactics will be employed.

IMPROVEMENT:

SOLUTION: Have an emergency response team (joint between agencies/interagency) that gets activated automatically when an emergency occurs.
OBJECTION: Too long. Emergency response team; BUT with clear guidelines.
IMPROVEMENT:

SOLUTION: Ensure a point of control.
OBJECTION: It is a perfect solution however need to sensitize all team members to the need and point of control.
IMPROVEMENT: None.

SOLUTION: Streamline chain of command and communication strategy. One point of contact for response coordinator.
OBJECTION: Good point. Who will coordinate? - project operations manager?
IMPROVEMENT:

SOLUTION: Strengthen existing networks.
OBJECTION: YES, perfect!
IMPROVEMENT: Close working group.
PAIN POINT: Customs Clearance Delays

Summary: Build-in flexibility in policies/laws for emergency situations (e.g., government exemptions, legislation governing humanitarian goods), and use technology to make humanitarian imports easy.

SOLUTION: Government exemption on humanitarian supplies. Engage government legal bodies to have waivers.
OBJECTION: There is no proper documentation that outlines exemptions on humanitarian supplies.
IMPROVEMENT: Application of technology tools such that there is no need for documentation.

SOLUTION: Regulation and laws regulating humanitarian imports and highlighting clearance process.
OBJECTION: Government reluctantly since it is the business of generating revenue and picking humanitarian alone can set precedence. No special cases.
IMPROVEMENT: Have more government engagement that support the law enforcement hence easing humanitarian imports.

SOLUTION: Policies to be in place to clear good fast enough in the situation of an emergency.
OBJECTION: This provides room for illegal and counterfeit supplies to enter the country because the perpetrators are likely to take advantage of the leniency that may come with quick clearance procedures.
IMPROVEMENT: There is a need to first have the supplies classified, then employ the use of technology for traceability such as blockchain and have it legislated to allow for speedy clearance.

SOLUTION: Engage a professional service provider. Lack of funds. Lack of capacity in service providers. Lack of proper government legislation on the procedure to clear the goods.
OBJECTION: Fundraise and do competitive bidding to allow get a professional clearances agent who at affordable rate.
IMPROVEMENT: Engage government to allow a good relationship.

SOLUTION: Early stakeholder engagement – Inform all the actors before the humanitarian consignment leaves the port of origin.
OBJECTION: Without changing legislation that governs customs clearance this will not work.
IMPROVEMENT: Communications channels should be fully exploited.

SOLUTION: Put in place legislation that will govern clearance of humanitarian goods.
OBJECTION: corruption in different stakeholders in supply chains.
IMPROVEMENT: Sensitization and participation of all stakeholders.

SOLUTION: Include government as stakeholder partner. Emergency kits.
OBJECTION: Legislation process with most of our law makers is not easy due to lack of understanding.
IMPROVEMENT: Involve policy makers to create demand for efficiency by redefining key performance indicators, e.g., goods to be cleared. Five days by adopting digitization.

SOLUTION: Acts to exempt humanitarian assistance goods.

OBJECTION: Legislation is a very lengthy process and customs are gate keepers for government to raise revenue.

IMPROVEMENT: Catalogue all humanitarian goods and lobby the government to have them exempted from taxes.

PAIN POINT: Poor infrastructure

Summary: Good communications and leveraging technology (e.g., drones), and continuing to invest in strengthening national infrastructures.

SOLUTION: Employing the use of high-end technology to overcome the ambiguity by poor infrastructure e.g., using donor to deliver goods to impassable locations.

OBJECTION: Not enough drones are available to transport all of the products and the goods are too heavy.

IMPROVEMENT: Drones – ok.

SOLUTION: Use drones.

OBJECTION: Highly regulated and not sustainable.

IMPROVEMENT: Develop drones that have passed all regulations and sustainability criteria and get preauthorization to use in all areas.

SOLUTION: Improvise most critical infrastructure.

OBJECTION: Which is the critical infrastructure.

IMPROVEMENT: Provision of buyer communication line. Such as telephone numbers.

SOLUTION: Find different ways of getting the products to the point of use.

OBJECTION: Give a specific solution.

IMPROVEMENT: Use infrastructure (physical) less dependent models. For transportation, like drones and helicopters. Use a different way to get to the point of disaster for example – air transport, (if road networks are poor) use of different communication options, such as tollfree lines, etc.

SOLUTION: Solution is to build more and better roads that leads to destinations of areas which require needs.

OBJECTION: Objections is of the government and institutions that are in charge of making up roads, will slow down services. There will be no time to build roads.

IMPROVEMENT: Solutions is finding alternatives roads on way that will lead to those specific areas that require need. Provide prefabs and tents.

SOLUTION: Government coordination and environment.

OBJECTION: Some countries have unstable governments (political instability).
IMPROVEMENT: Coordination with the World Bank for the improvement of infrastructure (roads, airports, and ports) as well as the United Nations. Provision of tollfree number for communication.